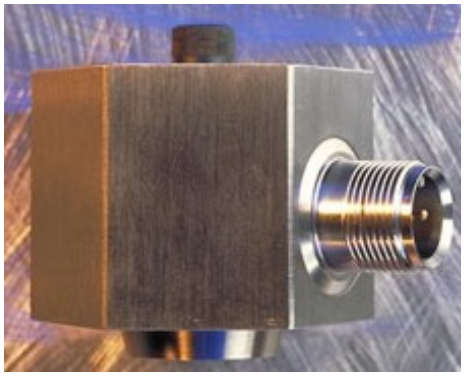
MODEL IT6810/IT6811/IT6812
Impact Transmitter
MODEL 6850
Impact Meter

Installation Manual



IT6810

6850 connected to an IT6810

1180

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M9261 Revision: K

1. General

This bulletin should be used by experienced personnel as a guide to the installation of the Model IT6810/IT6811/IT6812 Impact Transmitter. In addition, this manual also contains user information for the 6850 Impact Meter. Information pertaining to the Impact Meter begins in Section 8. of this manual. Selection or installation of equipment should always be accompanied by competent technical assistance. We encourage you to contact the Metrix Instrument Co. or its local representative if further information is required.

IMPORTANT: BEFORE PROCEEDING TO INSTALL AND WIRE THE TRANSMITTER, READ AND THOROUGHLY UNDERSTAND THESE INSTRUCTIONS. CONFIRM THAT THE HAZARDOUS AREA RATING OF THE TRANSMITTER MEETS OR EXCEEDS THAT OF THE AREA THE UNIT IS TO BE INSTALLED IN.

2. Specifications

Sensor: Piezoelectric accelerometer with integral signal conditioner

Output Current: 4 to 20 mA, 2 wire current sinking

Impact Range: Output proportional to impacts over an adjustable time base

of 0.8 to 3.2 sec. 16 impacts provides a full scale range (20 mA)

Impact Threshold: Threshold is field adjustable from 50mV to 1200mV

Dynamic Signal: Viewable as AC signal on current loop.

Case Material: 303 stainless steel, passivated

Mounting: Supplied with both 1/4-28 and M6 threaded captive allen screws

Shock Limit: 5,000 g peak

Temperature Range: -40°C to +100°C

Sensitivity vs. Temperature: <0.05%/°C

Cross Axis Response: Less than 5%

Loop Supply Voltage: 15 to 30 VDC.

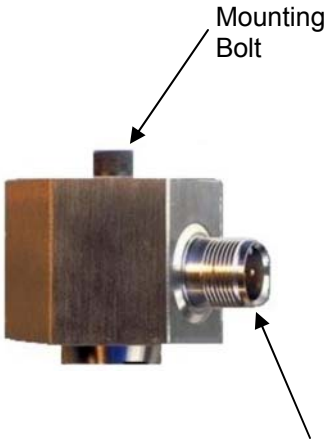
Maximum Load Resistance: 50 (Vs-15) ohms

Sealing: Hermetic

Electrical Connection: IT6810: 2 pin MIL-C-5015 style

IT6811: Integral 2 wire cable, straight exit

IT6812 : Integral 2 wire cable, side exit



Isolation: 500 VRMS, circuit to case

Hazard Rating: Approved for UL and cUL certified EXPLOSION-PROOF Class I, Div. 2 Groups A-D.

Baseefa Intrinsically Safe Ex ia IIC T4 Ga (-40°C $\leq$ Ta $\leq$ 100°C)

CSA Certified Intrinsically Safe for Class I, Div.1, Groups (A-D)

Environmental Rating: NEMA 4X

Electromagnetic Compatibility: CE Mark

CE

1180

"This apparatus is suitable for use in Class I, Division 2 groups A, B, C and D, or unclassified or nonhazardous locations."

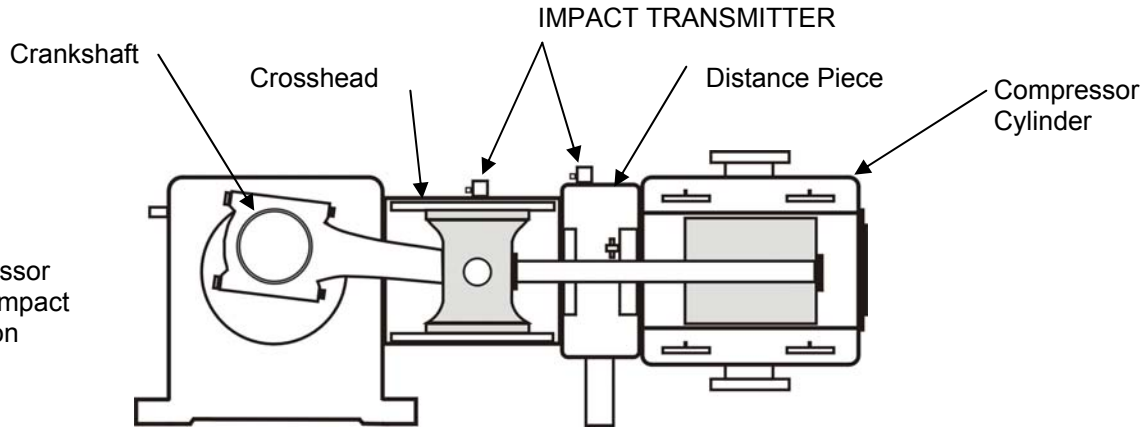
"WARNING: EXPLOSION HAZARD. DO NOT DISCONNECT WHILE CIRCUIT IS LIVE OR UNLESS THE ARE IS KNOWN TO BE FREE OF IGNITIBLE CONCENTRATIONS."

"WARNING: SUBSTITUTION OF ANY COMPONENTS MAY IMPAIR SUITABILITY FOR DIVISION 2."

3. Mechanical

3.1. Mounting Location

The Impact Transmitter is designed to detect mechanical looseness, not vibration. Therefore, it is mounted with its center bolt perpendicular to the direction of rod motion, on top of the crosshead or extension piece, where it will be out of the way of routine inspection or maintenance.



Sketch of compressor cylinder showing Impact Transmitter location

The Impact Transmitter is supplied with both a 1/4-28 and a metric M6 x 1 threaded bolt. Once threaded through the top half of the housing, the bolt becomes captive and will not inadvertently fall out. It can be bolted to a machined surface or it can be attached using an optional 1/4-18 NPT threaded adapter. Any loose items on or near the compressor cylinder must be tightened or removed. Never install on bolted covers or access doors. Since the Impact Transmitter detects mechanical looseness, "rattle noise" from loose external parts can be mistaken for internal loose parts. This will result in false indications of compressor running condition. Ensure that the maximum ambient temperature is not exceeded.

3.2. Machined surface

Prepare a flat surface using an aircraft counter bore* with a minimum 1.0 inch diameter and then tap the center hole for a ¼-28 or M6 x 1 thread allowing for a minimum threaded depth of 3/8 inch (10mm). The tapped hole must be perpendicular to the flat surface within 1 degree. Apply a small amount of grease to the mating surface of the transmitter to allow for proper machine contact. With the connector pointed in a convenient direction, thread the appropriate mounting bolt through the housing and into the tapped hole. Torque the bolt to 75 inch-pounds maximum.

3.3 NPT Threaded Adapter

This method allows a standard pipe thread to be drilled and tapped into the compressor body. The threaded adapter has the needed machined surface to insure proper mounting of the transmitter. This threaded adapter is available from Metrix (see page 6). Install the transmitter as described in paragraph 3.2.

3.4 Explosion-proof housing for IT6812:

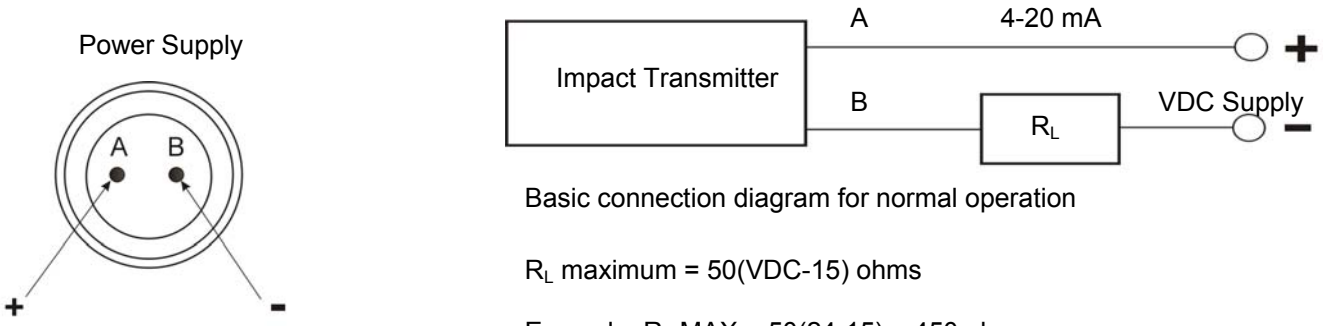
The 9288-XXX explosion-proof housing allows the transmitter to be installed into a Class I, Div. 1 (Groups A-D) area without the use of an intrinsically safe barrier. This housing is available from Metrix (see page 7). Install the transmitter and housing in a similar manner as described in paragraphs 3.1 & 3.2.

4. Electrical

The transmitter is a two-wire, 4-20 mA loop powered device and is wired like any other such field transmitter. One difference, however, is that rigid conduit cannot be connected directly to the transmitter. If conduit is required, use flexible conduit and provide a service loop to avoid any conduit strain on the transmitter. A simple wiring diagram is shown below.

Typical input resistor values used in PLCs, monitors and DCSs are 50,100 or 250 ohms. The maximum resistance value that can be used in the current loop is a function of the supply voltage (VDC).

Wiring Diagram for Normal Operation



Basic connection diagram for normal operation

R_L maximum = 50(VDC-15) ohms

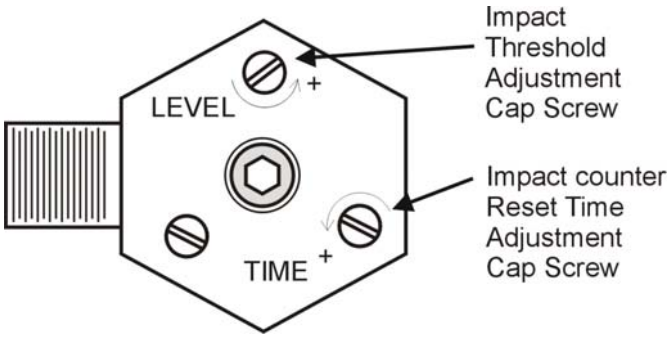
Example: R_L MAX = 50(24-15) = 450 ohms

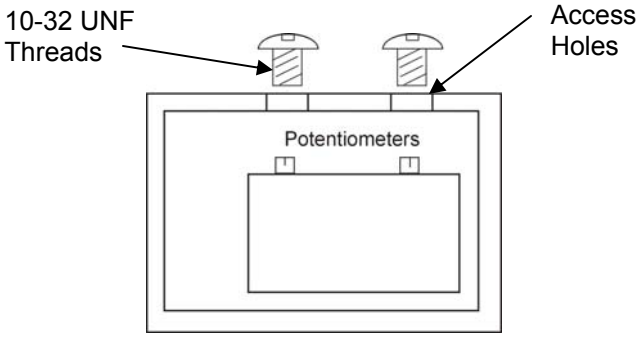
MODEL	TERMINAL	COLOR
IT6811	A	BLACK
IT6811	B	WHITE
IT6812	A	RED
IT6812	B	BLACK

The connection to the transmitter can be made weather tight by using silicon grease in the connector. Metrix cable information is located on page 7.
*Aircraft counter bores are available from most machine tool suppliers.

5. Field Adjustments

5.1. The impact level threshold adjustment and the impact counter reset time adjustment can be made in the shop prior to installing the transmitter. These adjustments can also be made in the field as long as there is access to the adjustment screws. Adjustments are usually done during initial installation and normally do not have to be changed. Both of these adjustments are made by removing the small cap screws located on the top of the transmitter. When these screws are removed, small potentiometers become visible. A miniature screwdriver (Jewelers 1.4 mm slotted) is required to make adjustments to these potentiometers.





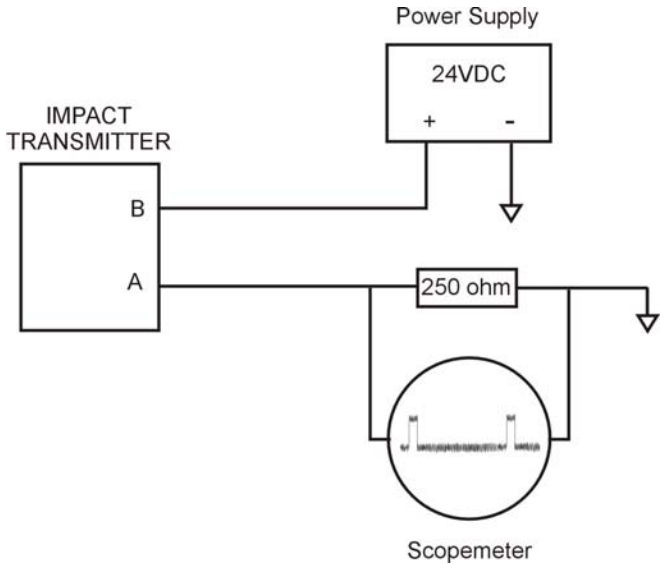
Transmitter top view, illustrating adjustment cover screw locations

5.2. Adjustments to the Impact Transmitter should only be made while it is connected in the special test circuit shown below. The transmitter is connected with reversed polarity, that is with +24VDC connected to Pin B, in order to place it in the test mode. **Connecting +24VDC to Pin B should only be used for making or verifying transmitter adjustments.** For normal operation the +24VDC must be supplied to Pin A. It is recommended that an installed transmitter be connected in the test circuit rather than reversing its polarity in the field circuit in order to preclude false alarms. In the test circuit the loop current will be 12 mA +/- 1 mA, which may exceed the PLC or DCS alarm level.

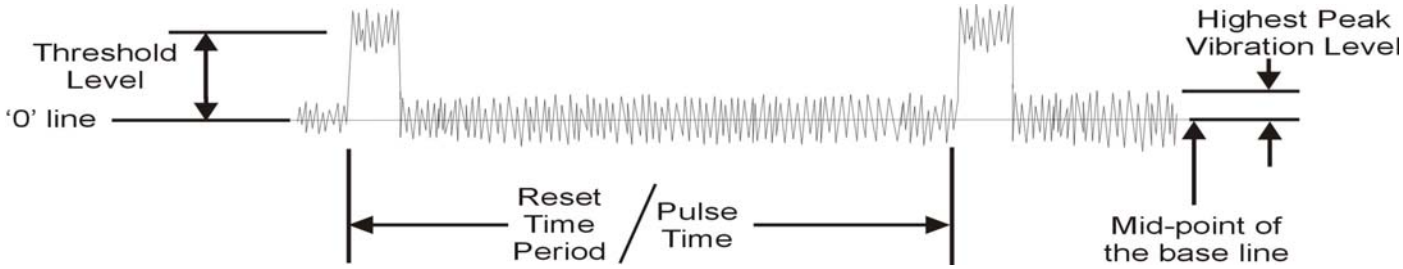
Test Circuit

Example of a test circuit for setting impact level threshold and impact counter reset time.

The Impact Meter 6850-001 can be used in lieu of the above circuit. The calibrator has an LCD display for read out of the threshold, pulse time, peak vibration and current readings. It can also provide power for the Impact Transmitter. Refer to Section 9. for more information about the Impact Meter.



5.3. When connected with reverse polarity in the test circuit, periodic current pulses occur similar to those shown in the illustration below. These pulses are not present when the transmitter is connected normally. The adjustments settings can be determined by observing the amplitude and time period of these pulses. A 250 ohm resistor is used to convert the current pulses to voltage pulses, which can then be observed by the use of an oscilloscope or scope meter.



Example of time waveform showing pulse level and time period (not to scale)

Both the impact threshold level and impact counter reset time can be observed from the oscilloscope display. If the Impact Transmitter is installed on a running compressor, the vibration signal will be present as well. This is illustrated by the "high frequency" baseline level that is at the scope "0" line and on top of the pulses as well. The height of the pulse represents the threshold level and the time from the leading edge of one pulse to the next leading edge represents the reset time.

5.4. Setting Threshold Level

When the transmitter is installed and the compressor is running, the scope will show the vibration time waveform. If the compressor is running smoothly there will be very few impacts visible on the waveform. This will allow for a good baseline level to be established. The vibration level should be measured from the highest vibration peak to the mid-point of the baseline in mV.

Establish a mid-point through the baseline signal at the scope "0" line as well as at the top of the pulse. Use these two mid-points to measure the threshold level as seen in the example. Assuming a smooth running compressor, adjust the threshold level to 2 times the peak vibration level, less if the appearance of spikes indicate some mechanical looseness already exists. One turn of the 'LEVEL' potentiometer provides approximately 130 mV change in the threshold level.

5.5. Setting Reset Time

Use the scope graduations to measure the time period between the leading edge of each pulse. This setting is used to allow for the predominant running speed of the machine, that is, the speed that it runs most of the time.

The transmitter is factory set to one of the three compressor speed ranges shown in the following table.

Factory settings:

Model No.	Speed Range		Reset Time/Pulse Time
IT68XX-001	Low	300 RPM	3.2 sec.
IT68XX-002	Medium	600 RPM	1.6 sec.
IT68XX-003	High	1200 RPM	0.8 sec.

Other compressor speeds can be accommodated by interpolating the data in the table or by applying the following guideline:

Calculate: 960/ RPM = Reset Time in seconds

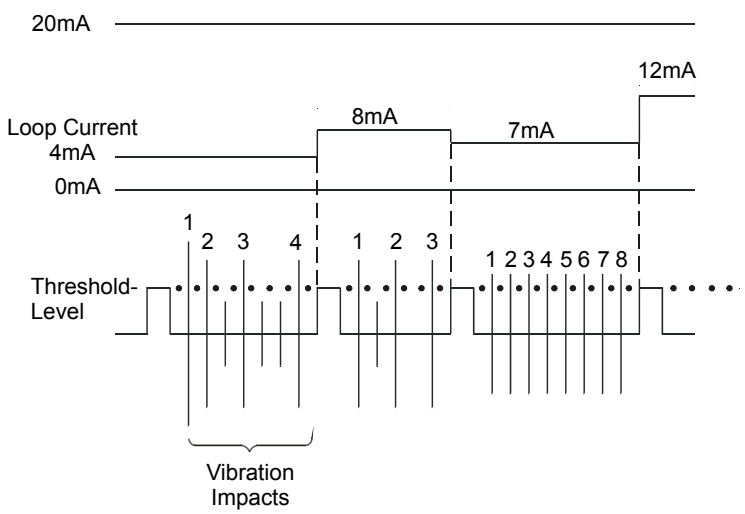
For a compressor that normally runs at 300 RPM, then:

960/300 = 3.2 sec. Reset Time

One turn of the 'TIME' potentiometer provides approximately 0.3 seconds change in the time period. The time delay can be set from .8 to 3.2 seconds.

6. Using Impact Severity

In normal operation the loop current from the Impact Transmitter is proportional to the number of impacts which exceed the threshold level during the reset time period. The current will increase 1mA for each impact above the threshold level up to a maximum of 20mA. The current output is updated at the end of the each reset time period. The Impact Transmitter is not synchronized with the machine rotation. The loop current may vary from one time period to the next. On a smooth running machine the output current should remain at 4mA for extended operating periods. In the illustration below, the transmitter's internal impact counter reset pulses and threshold level are superimposed on the machine's vibration signal. This illustrates that only vibration impacts that exceed the previously set threshold level are counted by the impact counter. The reset pulses are not present on the current loop in normal operation. As a safety feature, if sixteen or more impacts above the threshold level are detected before the end of the reset time period the current will immediately go to 20mA.



Impacts	mA
0	4
1	5
2	6
3	7
4	8
5	9
6	10
7	11
8	12
9	13
10	14
11	15
12	16
13	17
14	18
15	19
16	20

Example of current output vs. number of impacts per time period.

Rule-of-thumb for setting high alarm/shut down levels on the PLC or DCS:

The early warning (high alarm) should be set to respond to a current value at or above 8.0 mA (4 impacts). An urgent warning (high-high alarm or trip) should be set to respond to a current value at or above 12.0 mA (8 impacts). Operating experience might provide data supporting some variance from these values. Remember, the threshold level that is set will affect the number of impact counts. If the threshold is set low, then set the count criterion for alarms higher.

After setting reset time and threshold level, return the power connections to +24V on "A" and negative voltage on "B". After applying power, a simple check can be performed by tapping the transmitter with a coin or small screw driver. The 4-20 mA signal should increase proportionally with the rate of tapping.

7. How To Order…

	A		B
IT6810 -	❒❒❒		
IT6811 -	❒❒❒-	❒❒❒	

A

NOTE: As set from factory
A = 001 - 300 RPM, 7 g threshold
A = 002 - 600 RPM, 12 g threshold
A = 003 - 1200 RPM, 16 g threshold

B

Cable length in tenths of a meter
Example: 030 = 3.0 meters

A Machine RPM range

001	= Low	< 500 RPM
002	= Medium	500-1000 RPM
003	= High	> 1000 RPM

8. Optional Accessories

Cable Assemblies

Specify Model 8978-111-0050 two (2) pin socket connector with integral, molded splash proof boot, 0.25" diameter polyurethane jacketed cable, twisted pair conductors and shield. Cable is terminated in pigtail wires, 5 meters long (16.4 ft.).

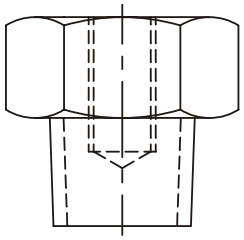
Specify Model 8978-211-0050 two (2) pin socket connector with cable strain relief, 0.25" diameter polyurethane jacketed cable, twisted pair conductors and shield. Cable is terminated in pigtail wires, 5 meters long (16.4 ft.).

Other cable lengths specified using last four (4) digits in XXX.X meter format. Example: 0030 designates 3.0 meters (9.8 ft).

-111-XXXX

-211-XXXX

Note: All 8978 connector/cable assemblies rated to 121°C (250°F) max.



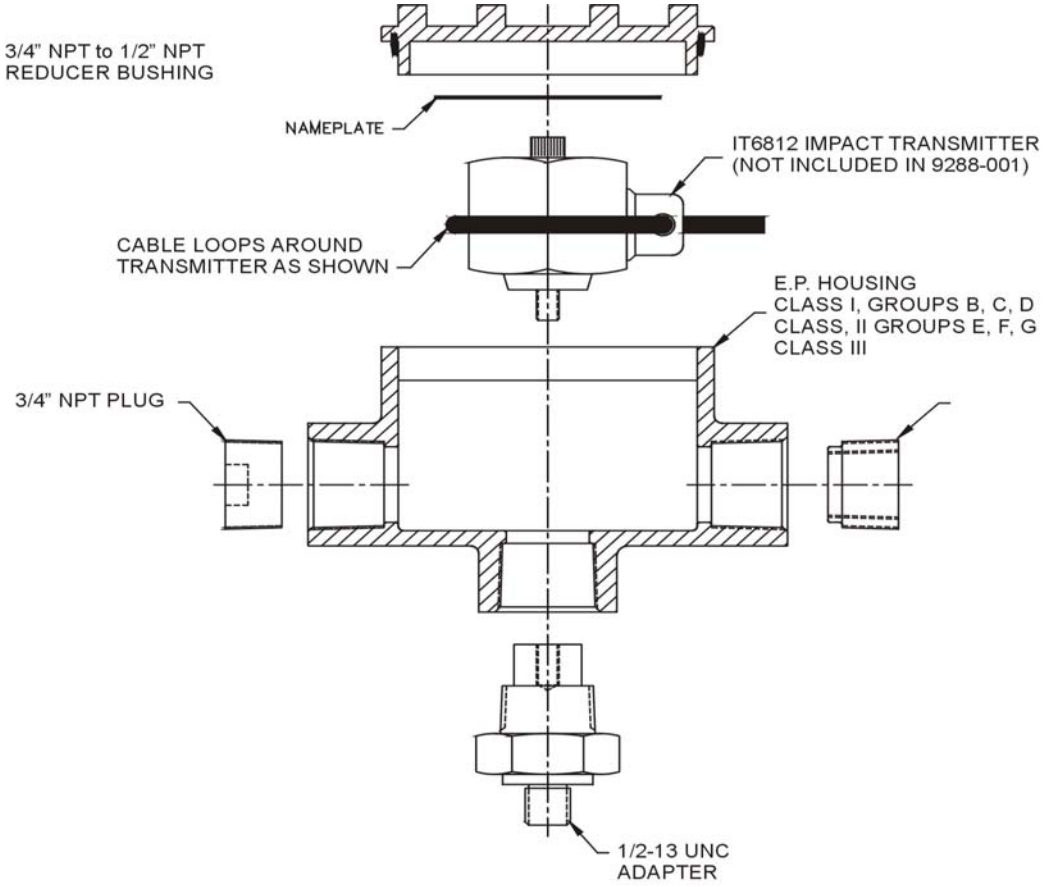
NPT Threaded Adapters

P/N: 9272-001: 1/4-18 NPT male thread to female 1/4-28 UNF

P/N: 9272-002: 1/4-18 NPT male thread to female M6 X 1

Impact Transmitter Calibrator

9288-001 E.P. Housing for IT6812 Impact Transmitter



How To Order

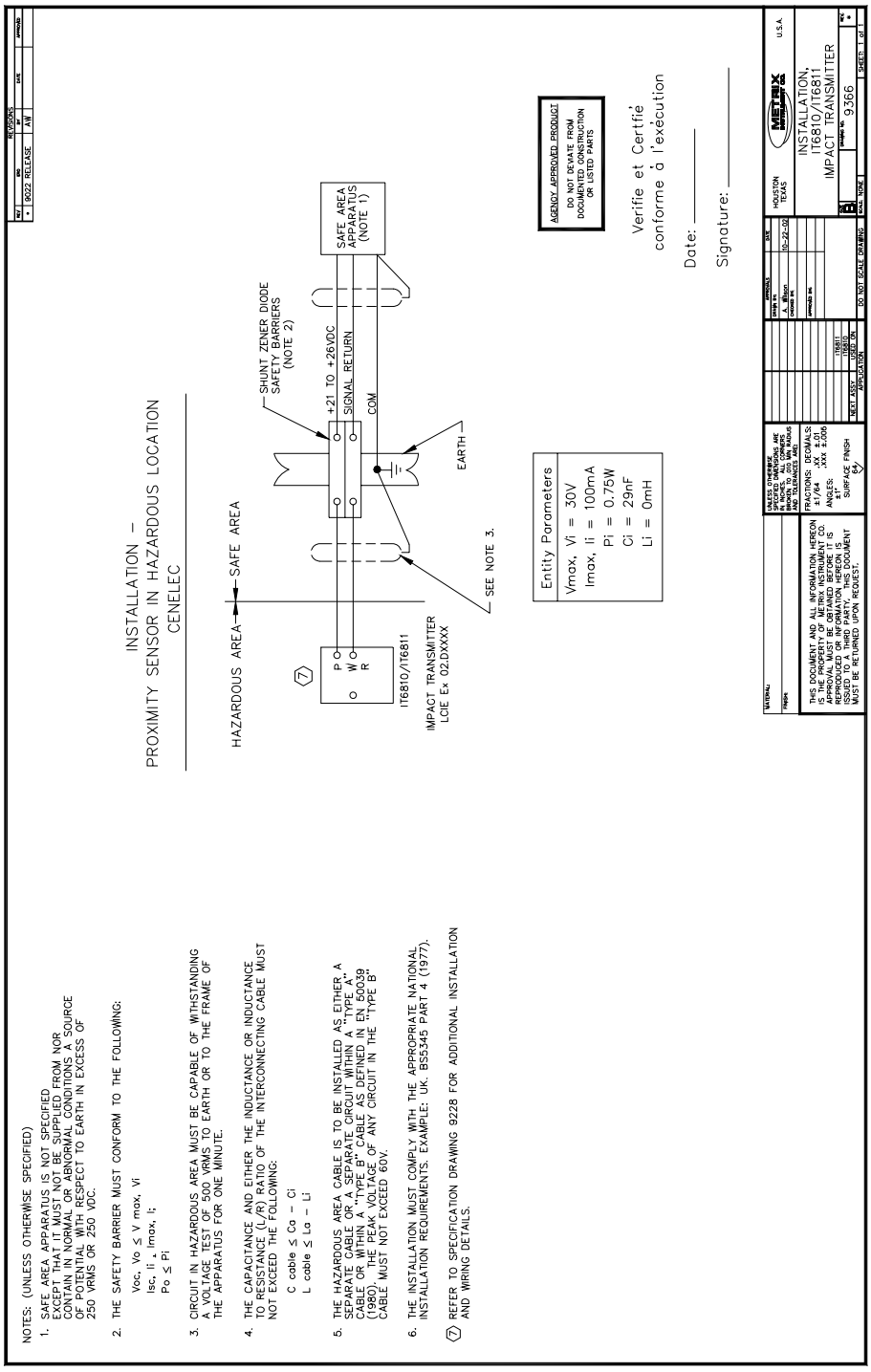
P/N: 9288-001: 1/2-13 UNC male thread to 1/4-28 UNF female

P/N: 9288-002: 1/4-18 NPT male thread to 1/4-28 UNF female

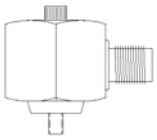
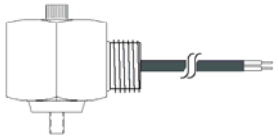
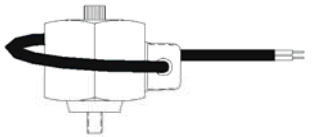
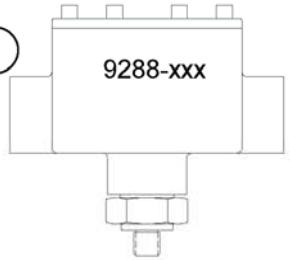
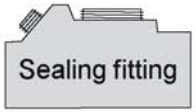
P/N: 9288-003: 1/2-14 NPT male thread to 1/4-28 UNF female

Baseefa Special Conditions for Safe Use:

In order to ensure temperature classification and safety, the power supply should adhere to the following: Uo ≤ 30V, Io ≤ 100mA, and Po ≤ 0.75W



Hazardous Area Ratings / Installations Guidelines for Metrix IT6810/ 6811/ 6812 Impact Transmitters

Impact transmitter	Installation requirements	Hazardous Area Rating
IT6810  +	(1) Intrinsic Safety barriers per dwg #'s 9366 or 9683 found in Impact installation manual M9261 (2) Armored cable assembly p/n 9334-211-xxxx, or equal	= CSA - Class I, Div 1, Groups A-D LCIE- EEx ia IIC T4 (T = 100^{0}C)
IT6811  +	(1) Wiring contained within Div 2 Flex & rigid conduit	= UL & cUL Class I, Div 2, Groups A-D
	(1) Intrinsic Safety barriers per dwg #'s 9366 or 9683 found in Impact installation manual M9261 Div 2 Flex & rigid conduit	= CSA - Class I, Div 1, Groups A-D LCIE- EEx ia IIC T4 (T = 100^{0}C)
IT6812 within →  + (1)  9288-xxx + (2)  Div 1 Flex conduit (3)  Sealing fitting		= CSA - Class I, Div 1, Group B-D

METRIX INSTRUMENT CO.
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8824 Fallbrook
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281-940-1802
John Polhemus April 12, 2006 Rev 1

MODEL 6850 IMPACT METER

FEATURES
Display peak amplitude of Impacts within machine
Display transmitter's Impact "Threshold level"
Display transmitter's Impact "Pulse Time"
Display transmitter's 4-20mA output
Waveform access through BNC connector
Powers 6810 or 6812 during setup & checkout
Select transmitter's Pulse-Time, 4-20mA, or Peak Detect mode
Battery powered, digital display

BENEFITS
One device for transmitter Checkout & Setup
Eliminates need for Oscilloscope & voltmeters
Simple to operate for Task efficiency

SPECIFICATIONS
Functions: Setup, Operation, or Measurement
Measurement Ranges
Threshold level: 50 to 1,200 mV
Pulse time: 0.8 to 4.2 seconds
Peak Detect: 0 to 2,100 mV
Loop current: 4 to 20 mA
Measurement Accuracy: ± 5 % of full scale
Display: Digital readout, 2 lines x 16 characters
Power: Uses standard 9V batteries, (3)
Enclosure: High-impact, polycarbonate body
Environmental rating: Water resistant

IT6810 / 6812 IMPACT TRANSMITTER

Metrix Impact Transmitters measure "Impact Severity", defined as, the number of events (typically caused by mechanical looseness or detonation) which exceed the preset "threshold level" within a preset "pulse time period".

The Impact Transmitter has a stepped 4-20 mA output that is proportional to 0 to 16 Impacts. The transmitter's Threshold level and Pulse time may be adjusted to "fine tune" it's response to the unique characteristics of the monitored equipment.

6850 OPERATION / OPERATING MODES

The 6850 Impact Meter is designed for quick check out or adjustment of Metrix Impact transmitters, either on an operating machine, or with the transmitter removed.

Simply connect the Meter to an Impact transmitter, toggle the Power switch, and select Pulse-Time, 4-20mA, or Peak Detect mode. In Pulse-Time mode, the transmitter's Threshold level (milli-volts), and Sample Time (seconds) are displayed, and may be adjusted while observing the changes. Switching to 4-20mA mode displays the current output directly, while Peak Detect mode displays the peak vibration level, in milli-volts, detected by the transmitter.

The Peak Detect mode is provided for measuring and displaying the amplitude of Impact peaks present at the measurement location. Peak Detect mode is most useful when "fine tuning" a transmitter for a particular machine. An Impact Threshold Level 2X to 3X the base line PD level has proven to provide good machinery protection monitoring. While the Pulse Time is a function of machine operating speed, calculated as follows: 960 divided by machine RPM = the Pulse Time (in seconds).

Please call if you have questions about the transmitter settings for your machines. We are here to help.

9. Using The Impact Meter

The Impact Meter is capable of taking Threshold, Pulse Time, Loop Current, and Peak Detect measurements. Prior to taking measurements with the Impact Meter, you must connect the Impact Meter to your Impact Transmitter device as shown in Figure 1.
Next, momentarily toggle the Power switch to the ON/OFF position. This will initialize the Impact Meter to start making the desired measurement.

Figure 1

9.1 Threshold/Pulse Time Measurement:

To initialize the Threshold/Pulse-Time measurement mode, set input switch 2 to Threshold, Pulse-Time, Peak Detect and input switch 3 to T/PT as shown in Figure 2.

NOTE: During initial power on of the Impact Meter, it may be necessary to wait up to 10 seconds for the Threshold and Pulse-Time measurements to stabilize.

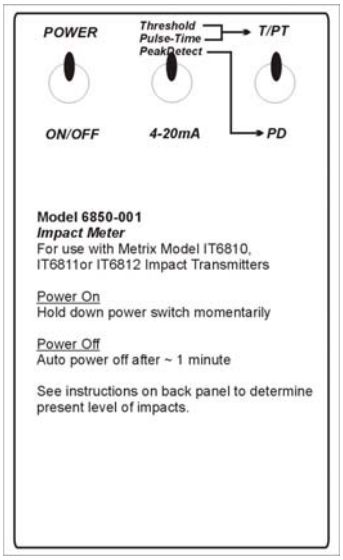
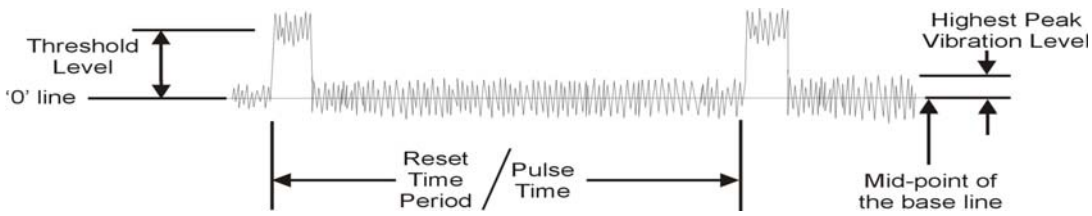


Figure 2

The Threshold/Pulse-Time measurement will configure the impact transmitter in setup mode. This mode will allow the Impact Meter to measure the Threshold and Pulse-Time generated by the Impact Transmitter. The Impact Meter will display the measured Threshold in milli-volts and the Pulse Time in seconds as shown below in Figure 3. Refer to section 5.3 and 5.4 of this user manual for more information on how to set the threshold and pulse-time of the Impact Transmitter.



Example of time waveform showing pulse level and time period (not to scale)

9.2 Peak Detect Measurement:

To initialize the Peak Detect measurement mode, set input switch 2 to Threshold, Pulse-Time, Peak Detect and input switch 3 to PD as shown in Figure 4. If the Impact Meter is already turned on, it will automatically detect the new switch setting and proceed with the Peak Detect measurement. If the Impact Meter is turned off, momentarily toggle switch 1 to the ON/OFF position. This will initialize the Impact Meter to start making Peak Detect measurements.

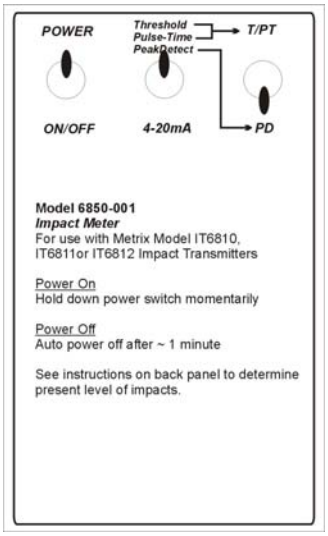


Figure 4

During initialization of the peak detect measurement; the Impact Meter will display “Initializing Peak Detect” as shown in figure 5. The Impact Meter measures the pulse time period setting of the Impact Transmitter and uses this to determine the internal timing of the measurement.

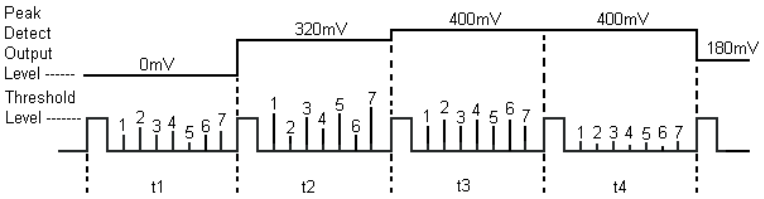
NOTE: Since the peak detect measurement is reliant on a stable pulse time setting of the Impact Transmitter, it is important not to adjust the pulse time on the Impact Transmitter while taking a peak detect measurement.

Figure 5

The Peak Detect mode enables the Impact Meter to measure the Peak impact voltage levels generated by the Impact Transmitter. Refer to Figure 6 for an example of a typical measurement.

Figure 6

Threshold Level	350mV			
	Pulse Time Period			
	t1	t2	t3	t4
1	200mV	360mV	200mV	160mV
2	320mV	260mV	320mV	100mV
3	260mV	360mV	200mV	180mV
4	300mV	300mV	320mV	80mV
5	100mV	380mV	200mV	160mV
6	260mV	320mV	320mV	60mV
7	300mV	400mV	200mV	180mV
Peak Detect Output	320mV	400mV	400mV	180mV



The peak detect measurement displays the peak voltage, Figure 6, amplitude (Impact Level) that is present during one pulse time period. The displayed value will increase if the last value measured is higher than the previous value measured. The displayed value will decrease if the new peak value is less than ½ of the previous peak value. For example, the displayed peak detect measurement for t1 as shown in Figure 8 is 320mV. This is the maximum impact level detected during the pulse time t1. During t2, the maximum impact level detected is 400mV. Since this value is greater than 320mV, the impact meter will display the new value of 400mV. During t3, the maximum impact level detected is again 320mV. However, the impact meter will continue to display 400mV since the previous value is slightly larger but not smaller by half. During t4, the maximum impact level detected is 180mV. Since this value is smaller than ½ of 400mV or smaller than 200mV, the Impact Meter will now display 180mV.

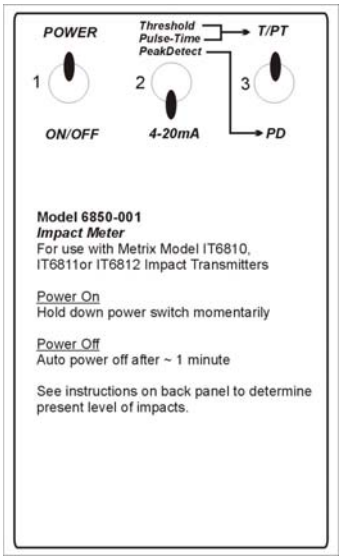
The main advantage of the peak detect measurement is that it provides a stable maximum peak "impact level" that may be used to set the Threshold level. As a rule of thumb, it is recommended that the threshold level be set 2 to 3 times the peak level during normal operation.

9.3 4-20mA Measurement:

To initialize the 4-20mA measurement mode, set input switch 2 to 4-20mA as shown below in Figure 7. If the Impact Meter is already turned on, it will automatically detect the new switch setting and proceed with the 4-20mA measurement. If the Impact Meter is turned off, momentarily toggle switch 1 to the ON/OFF position. This will initialize the Impact Meter to start making a 4-20mA measurement.

The 4-20mA measurement will configure the impact transmitter in normal mode. This mode will allow the Impact Meter to measure the 4 to 20mA loop current generated by the Impact Transmitter. Refer to Figure 8 for an example of a typical 4-20mA measurement. Refer to section 6 of this user manual for more information on the 4 to 20mA impact severity measurement.

Figure 7



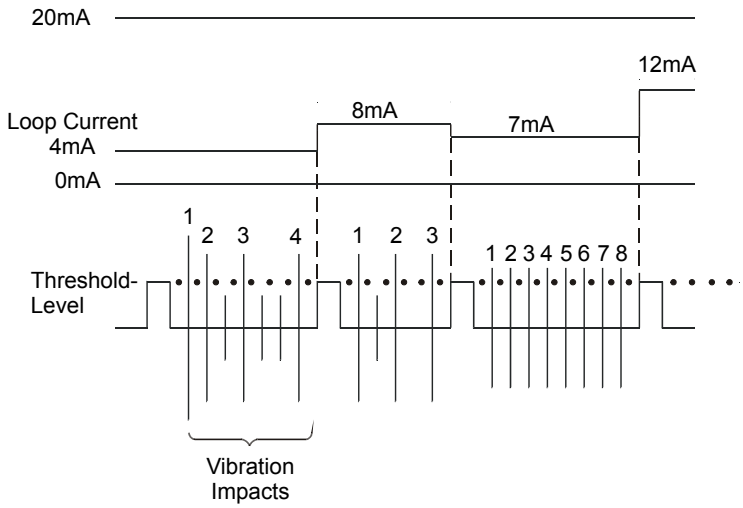


Figure 8

Example of current output vs. number of impacts per time period.

Impacts	mA
0	4
1	5
2	6
3	7
4	8
5	9
6	10
7	11
8	12
9	13
10	14
11	15
12	16
13	17
14	18
15	19
16	20

9.4 Dynamic Signal

A BNC Connector is provided on the Impact Meter for viewing the impact waveform through the use of a scope or other measurement device.

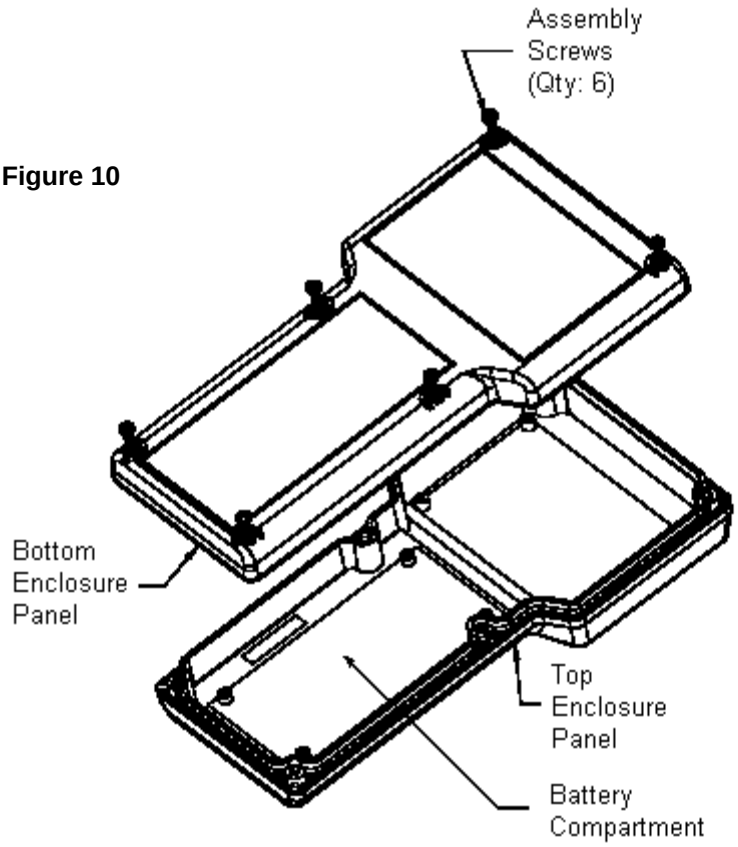
9.5 Battery Replacement

The Impact Meter is designed to offer approximately 8 hours of continuous operation under normal conditions. The Impact Meter checks for low batteries during power up. During this time, the Impact Meter will display “Low Battery Voltage Detected, Replace Batteries” as shown below in Figure 9 if the battery power is too low. After receiving this message, the batteries should be replaced to avoid any potential measurement errors.

Figure 9

To replace the batteries on the Impact Meter, remove the 6 screws on the back of the case as shown in Figure 10. This will allow access to the battery compartment.

Figure 10



9.6 Shut Down

In order to preserve battery life, the Impact Meter will shut down power on its own. This time may vary between 5 and 15 minutes depending on which mode it is operating in.

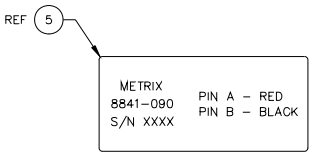
Alternatively, the power to the device may be turned off by holding down switch 1 in the ON/OFF position for 5 seconds and then releasing it.

The Impact Meter will also automatically detect when an Impact Transmitter is not connected and will shut down on its own to preserve battery life.

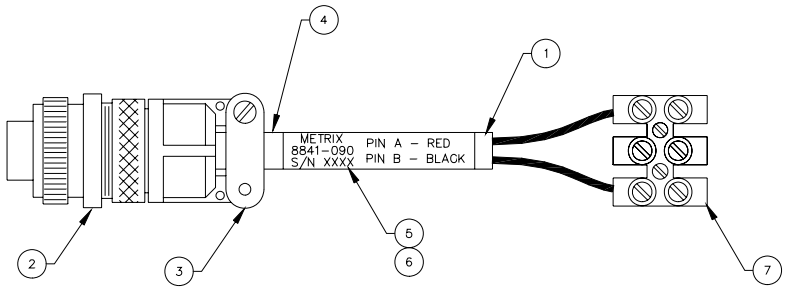
REVISIONS				
REV	ERO	BY	DATE	APPROVED
*	9330 RELEASE	AW		

NOTES: (UNLESS OTHERWISE SPECIFIED)

1. CUT CABLE (ITEM 1) TO APPROX. 6 INCHES LONG.
2. STRIP AND TIN BOTH ENDS OF CABLE.
3. SOLDER RED WIRE TO PIN A; BLACK WIRE TO PIN B. SECURE CONNECTOR ASSY (ITEM 2) WITH CLAMP (ITEM 3) AND BUSHING (ITEM 4).
4. PRINT MODEL NO. AND SERIAL NO. ON LABEL (ITEM 5) AS SHOWN IN DETAIL 'A'.
5. SECURE LABEL TO CABLE (ITEM 1) NEAR CONNECTOR AND COVER WITH CLEAR TUBING (ITEM 6).
6. SECURE OTHER END OF CABLE TO TERMINAL BLOCK (ITEM 7).



DETAIL 'A'



MATERIAL:	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. ALL CORNERS BROKEN TO .010 MIN RADIUS AND TOLERANCES ARE:		APPROVALS	DATE
FINISH:			DRAWN BY:	
			A. Wilson	04-11-05
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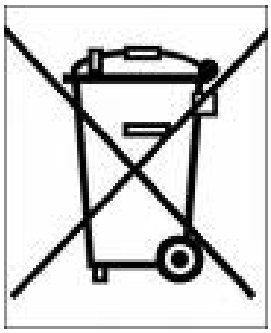
ADAPTER, 2 PIN (M)
MS3106 TO TERM. BLK.

SIZE	DRAWING NO.	REV.
B	8841-090	*

SCALE: 1:1 SHEET: 1 of 1

ENVIROMENTAL INFORMATION



This electronic equipment was manufactured according to high quality standards to ensure safe and reliable operation when used as intended. Due to its nature, this equipment may contain small quantities of substances known to be hazardous to the environment or to human health if released into the environment. For this reason, Waste Electrical and Electronic Equipment (commonly known as WEEE) should never be disposed of in the public waste stream. The “Crossed-Out Waste Bin” label affixed to this product is a reminder to dispose of this product in accordance with local WEEE regulations. If you have questions about the disposal process, please contact Metrix Customer Services.

METRIX
Experience Value

Machinery Vibration & Protection

Declaration of Conformity

Manufacturer: Metrix Instrument Co.

Address: 8824 Fallbrook Dr., Houston, Texas 77064

Equipment Type: Model Impact Transmitter Type IT6810 & IT6811

Directive 94/9/EC ATEX

Provisions of the Directive fulfilled by the Equipment:

II G
Ex ia IIC T4 Ga (-40°C ≤ Ta ≤ +100°C)

Notified Body for EC-Type Examination:

Baseefa 1180 Buxton UK

EC-type Examination Certificate:

Baseefa 10ATEX0063

Notified Body for production:

Baseefa 1180 Buxton UK

Harmonised Standards Used:

EN60079-0: 2009
EN60079-11: 2007

Other Standards and Specifications used:

None.

On behalf of the above named company, I declare that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.

R Ganesh 4/12/11

Ganesh Ladi
Quality Manager

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